

# Station 5

1.  $5+6+7+8+\dots+26$
- (A)  $\sum_{k=8}^{29} (k-3)$
- (B)  $\sum_{k=1}^{21} (k-3)$
- (C)  $\sum_{k=2}^{23} (k-3)$
- (D)  $\sum_{k=5}^{26} (k-3)$

2.

Find the sum.

$$\frac{4}{2} + \frac{9}{1} + \frac{1}{18} + \dots + \frac{1}{144}$$

- (a)  $\frac{36}{127}$
- (b)  $\frac{81}{127}$
- (c)  $\frac{144}{127}$

(d) Too many terms are missing to find the sum.

3.

Find the sum.

$$\sum_{i=-1}^{\infty} 5 \left( \frac{3}{5} \right)^{i-1}$$

- (a)  $\frac{2}{25}$
- (b)  $\frac{2}{75}$
- (c)  $\frac{2}{5}$

(d) There are too many numbers to add.

4.

What is the eighth term of the geometric sequence whose third term is  $\frac{1}{5}$  and whose sixth term is  $\frac{1}{10}$ ?

- (a) 36
- (b) 40
- (c) 45
- (d) 49

5.

What is the third term of the arithmetic sequence whose 17th term is 9 and whose 21st term is 12?

- (a)  $-\frac{3}{2}$
- (b)  $-\frac{4}{5}$
- (c)  $\frac{5}{2}$
- (d)  $-\frac{2}{5}$